Patent claims

1. Process for transferring data into or out of a control apparatus (16) as a memory-programmable control unit, characterized by the following operations:

5   — Coding data (10) on the part of the sender with at least an individual sender identification (18, 24),

     — Decoding data (10) on the part of the recipient and checking the individual sender identification (18, 24) and validity,

10   — Comparison of individual sender identification (18, 24) with defined sender identifications (ID 1, ID 2 ... IDn),

     — Allocation of user rights for status alteration of transferred data (10) and/or of the control apparatus
15   in accordance with an authorization list (28) filed on the part of the recipient to the extent that the individual sender identification (18, 24) is entered in the authorization list,

     — Rejection of data (10) to the extent that the
20   individual sender identification (18) is invalid or not entered into the authorization list (28).

2. Process according to claim 1, characterized in that the

authorization list (28) is deposited in a memory of the control apparatus (16) on the part of the recipient.

3. Process according to claim 1 or 2, characterized in that a memory range (BSS, PS, DS) of the control apparatus (16) constructed as a memory-programmable control unit is selectively actuatable through coding of the data set to be transferred.

4. Process according to at least one of the preceding claims, characterized in that the authorization list (28) is individually adaptable, whereby a manipulation of the authorization list (28) is possible only with the corresponding rights.

5. Process according to at least one of the preceding claims, characterized in that transfer types and/or memory ranges (BSS, PS, DS) are defined, whereby a coding with digital signature (24) and/or public and/or private key (26) takes place in the event of a data transfer out of the data processing apparatus.

6. Process according to at least one of the preceding claims, characterized in that the data (10) are coded on the part of the sender with a digital signature (18) and a public key (20), and in that the data (10) are decoded on the part of the recipient with an associated secret key (22).

7. Process according to at least one of the preceding claims, characterized in that the data (10) are transmitted coded.

8. Process according to at least one of the preceding claims, characterized in that the data (10) are transferred over a data network (14) such as an Intranet or the Internet.

9. Control apparatus as memory-programmable control unit, characterized in that the control apparatus (16) has a receiver unit with a decoding unit for decoding at least a sender identification (18) of received data (10'), in that the control apparatus (16) has an authorization list (28) in which rights for altering the status of the control apparatus (16) are assigned to various sender identifications (ID 1 ... IDn), and in that the status of the control apparatus is alterable with a valid sender identification (ID 1 ... IDn) contained in the authorization list) in according with the rights granted in the authorization list.

10. Control apparatus according to claim 9, characterized in that the control apparatus (16) has a sending unit for coding data (10) to be sent, in that in the coding device a digital signature and/or a public key is contained for coding data.

11. Control apparatus according to claim 9 or 10,

13

characterized in that the memory range of the memory-

programmable control unit is subdivided into definable

regions (BSS, PS, DS), whereby for each memory range (BSS,

PS, DS) in the authorization list (28), rights for

5   different sender identifications (ID 1, ID 2, IDn) are

definable.

12.   Control apparatus according to claim 11, characterized in

that the control apparatus is a memory-programmable

control unit.

14